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DATE MAILED: 07/08/2008

NOTICE OF ALLOWANCE AND FEE(S) DUE

S2706	7590	G70902008	EXAMINIR
PLA P.A.	ARCE DIAZ, MARLON A		
3580 WILSHIRE BLVD.	APPEN NUMBER		
TTH H-LOOD	3011	3011	

APPLICATION NO. | FILNG DATE | FIRST NAMED INVENTOR ATTORNEY DOCKET NO. CONFERMATION NO. | 10/53 463 | 10/17/2005 | Jac Ho Hone 2017-037 8930

TITLE OF INVENTION: BICYCLE DRIVE UNIT CAPABLE OF BACKWARD MOVEMENT AND NAUGHTROTATION AND FORWARD MOVEMENT TRAVELING WHEN RECTITUDE OR REVERSE PEDALING

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	YES	\$720	\$300	\$0	\$1020	10/08/2008

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 1SI. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

LOS ANGELES CA 90010

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or Fax (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where

appropriate. All further indicated unless corrects maintenance fee notifica	correspondence includir ed below or directed oth tions.	ng the Patent, advance of nerwise in Block 1, by (orders and notification of r a) specifying a new corre	naintenance fees was pondence address;	ill be and/o	mailed to the current (b) indicating a sepa	correspondence addr rate "FEE ADDRES	ess as S" for
CURRENT CORRESPONDENCE ADDRESS (Note: Use Block I for any change of address)				Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.				
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LOS ANGELES	s, CA 90010						(Depositor's	name)
							(Sig	nature)
								(Date)
APPLICATION NO.	PLICATION NO. FILING DATE		FIRST NAMED INVENTOR	ENTOR ATTORNEY DOCKET NO. CON		CONFIRMATION N	О.	
10/553,463	10/17/2005	•	Jae Ho Hong			2017-037	8930	_
TITLE OF INVENTION MOVEMENT TRAVEL			BACKWARD MOVEM	ENT AND NAU	GHTR	OTATION AND FO	DRWARD	
APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUI	S FEE	TOTAL FEE(S) DUE	DATE DUE	
nonprovisional	YES	\$720	\$300	\$0		\$1020	10/08/2008	
EXAM	IINER	ART UNIT	CLASS-SUBCLASS]				
ARCE DIAZ,	MARLON A	3611	280-266000					
1. Change of correspondence address or indication of "Fee Address" (37 CFR I.363). Change of correspondence address (or Change of Correspondence Address form PTOSB/122) attached. The Address' indication for "Fee Address' Indication form PTOSB/47; Rev 03-02 or more recent) attached. Use of a Customer Number is required.			(I) the names of up to or agents OR, alternati (2) the name of a single registered attorney or	me of a single firm (having as a member a attorney or agent) and the names of up to do atent attorneys or agents. If no name is				
	less an assignee is ident h in 37 CFR 3.11. Comp GNEE	ified below, no assignee pletion of this form is NO	THE PATENT (print or ty, data will appear on the p DT a substitute for filing an (B) RESIDENCE: (CITY wrinted on the patent):	atent. If an assign assignment. and STATE OR C	OUNT			
4a. The following fee(s) Issue Fee Publication Fee (N	vo small entity discount p		b. Payment of Fee(s): (Plea A check is enclosed. Payment by credit car The Director is hereby overpayment, to Depo	d. Form PTO-2038	is atta	ched. required fee(s), any de		/ srm).
	s SMALL ENTITY state	as. See 37 CFR 1.27.	b. Applicant is no lon					
NOTE: The Issue Fee an interest as shown by the	d Publication Fee (if req records of the United Sta	uired) will not be accepte tes Patent and Trademar	ed from anyone other than t k Office.	he applicant; a regi	stered :	attorney or agent; or th	ne assignee or other pa	aty in
Authorized Signature				Date				
Typed or printed name			Registration No.					
This collection of inform an application. Confiden submitting the completes this form and/or suggests Box 1450, Alexandria, V Alexandria, Virginia 223	nation is required by 37 C tiality is governed by 35 d application form to the ions for reducing this but 'irginia 22313-1450. DC k13-1450.	CFR 1.311. The informati U.S.C. 122 and 37 CFR USPTO. Time will var rden, should be sent to to O NOT SEND FEES OR	on is required to obtain or r 1.1.4. This collection is est y depending upon the indiv the Chief Information Office COMPLETED FORMS To	retain a benefit by t imated to take 12 i idual case. Any co er, U.S. Patent and D THIS ADDRESS	he pub minuter mmen Trader i. SEN	tic which is to file (and to complete, including s on the amount of tin nark Office, U.S. Dep D TO: Commissioner	I by the USPTO to programme you require to conformert of Commerce for Patents, P.O. Box	cess) g, and nplete , P.O. 1450.

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UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS

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APPLICATION NO.	O. FILING DATE		FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/553,463	10/17/2005		Jae Ho Hong	2017-037	8930
52706	7590	07/08/2008		EXAMINER	
IPLA P.A.			ARCE DIAZ, MARLON A		
3580 WILSHIRI	E BLVD.			ART UNIT	PAPER NUMBER
17TH FLOOR LOS ANGELES, CA 90010			3611 DATE MAILED: 07/08/200	8	

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 569 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 569 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

Notice of Allowability

Application No.	Applicant(s)			
10/553,463	HONG, JAE HO			
Examiner	Art Unit			
MARLON A. ARCE DIAZ	3611			

-- The MALING DATE of this communication appears on the cover sheat with the correspondence address-All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included
herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS
NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative
of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

- This communication is responsive to 10/17/05.
- 2. The allowed claim(s) is/are 1 and 2.
- 3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some* c) None of the:
 - 1. A Certified copies of the priority documents have been received.
 - 2. Certified copies of the priority documents have been received in Application No. _____
 - Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
 - * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

- 4. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
- 5. CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) hereto or 2) to Paper No./Mail Date
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- 1. Notice of References Cited (PTO-892)
- 2.
 Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3. Information Disclosure Statements (PTO/SB/08),
- Paper No./Mail Date 10/17/05
- Examiner's Comment Regarding Requirement for Deposit of Biological Material
- 5. Notice of Informal Patent Application
- Interview Summary (PTO-413),
 Paper No./Mail Date .
- 7. Examiner's Amendment/Comment
- 8. X Examiner's Statement of Reasons for Allowance
- 9. Other _____.

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Art Unit: 3611

DETAILED ACTION

An examiner's amendment to the record appears below. Should the changes
and/or additions be unacceptable to applicant, an amendment may be filed as provided
by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be
submitted no later than the payment of the issue fee.

The application has been amended as follows: all the reference characters corresponding to the elements recited in the detailed description of the drawings and used in conjunction with the recitation of the same element or group of elements in the claims are hereby to be enclosed within parenthesis so as to avoid confusion with other numbers or characters which may appear in the claims. For example:

- a. Claim 1 line 3, a drive shaft "1", should be replaced by a drive shaft -(1)--; in line 3, an inner bearing "B1", should be replaced by an inner bearing -(B1)--; in line 4, an internal bearing housing "H1", should be replaced by an internal bearing housing -- (H1)--; and so on throughout the claim.
- b. Claim 2 line 2, detent plate "16", should be replaced by detent plate –(16)--; in line 2, rotary plate "5", should be replaced by rotary plate –(5)--; in line 3, detent grooves "16a", should be replaced by detent grooves –(16a)--; and so on throughout the claim.

Allowable Subject Matter

Claims 1 and 2 are allowed.

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Art Unit: 3611

3. The following is an examiner's statement of reasons for allowance: there was no prior art found on "the combination of the shafts and their location relative to the gears (planetary gear system) and clutches".

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MARLON A. ARCE DIAZ whose telephone number is (571)272-1341. The examiner can normally be reached on Mon-Fri 8:00 am to 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lesley Morris can be reached on (571) 272-6651. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Art Unit: 3611

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Marlon Arce-Diaz

6/20/08

MAA

/Lesley D. Morris/ Supervisory Patent Examiner, Art Unit 3611